

In the Claims

1-10. (cancelled)

11. (new) A method for producing a piston accumulator, comprising the steps of:

mounting a piston in an accumulator housing for movement along a longitudinal axis of the housing with the piston separating an interior of the housing into two working chambers between first and second longitudinal ends of the housing;

providing at least a first shoulder in the interior of the housing adjacent to but spaced from the first longitudinal end of the housing;

inserting a first cover component at least partially within the housing through the first longitudinal end when open until an inner surface portion of the first cover component engages the first shoulder preventing further insertion of the first cover component;

deforming a first end portion of the housing between the first shoulder and the first longitudinal end at an acute angle relative to the longitudinal axis against an axial outer circumferential contact surface extending at a corresponding acute angle relative to the longitudinal axis and about an axial outer surface portion of the first cover component to secure the first cover component in the housing with the first cover component sealing the first longitudinal end of the housing closed; and

sealing the second longitudinal end of the housing closed.

12. (new) A method according to claim 11 wherein

the first longitudinal end has an end edge deformed to be substantially flush with the outer surface portion.

13. (new) A method according to claim 11 wherein

a projection extends axially from the outer surface portion of the first cover component.

14. (new) A method according to claim 11 wherein

the first cover component tapers in an outward direction along the contact surface.

15. (new) A method according to claim 11 wherein

the first end portion is deformed by axially forcing a first shaping tool against and over the first longitudinal end with a positioning bevel in the first shaping tool engaging the first end portion and extending at an acute angle corresponding to the angle of the contact surface.

16. (new) A method according to claim 11 wherein

the first end portion is formed with a reduced wall thickness relative to an adjacent portion of the housing, with a transition point between different wall thicknesses forming the first shoulder.

17. (new) A method according to claim 11 wherein

the first cover component is guided into the housing by engaging an insertion bevel tapering inwardly from a free end edge of the first longitudinal end on an interior surface of the housing.

18. (new) method according to claim 15 wherein the second longitudinal end is sealed by providing

a second shoulder in the interior of the housing adjacent to but spaced from the second longitudinal end of the housing;

inserting a second cover component at least partially within the housing through the second longitudinal end when open until an inner surface portion of the second cover component engages the second shoulder preventing further insertion of the second cover component; and

deforming a second end portion of the housing between the second shoulder and the second longitudinal end at an acute angle relative to the longitudinal axis against an axial outer circumferential contact surface extending at a corresponding acute angle relative to the longitudinal axis and about an axial outer surface portion of the second cover component to secure the second cover component in the housing with the second cover component sealing the second longitudinal end of the housing closed.

19. (new) method according to claim 18 wherein

the second end portion is deformed by axially forcing a second shaping tool against and over the second longitudinal end with a positioning bevel in the second shaping tool engaging the

second end portion and extending at an acute angle corresponding to the angle of the contact surface of the second cover component.

20. (new) A method according to claim 11 wherein the second longitudinal end is sealed by providing

a second shoulder in the interior of the housing adjacent to but spaced from the second longitudinal end of the housing;

inserting a second cover component at least partially within the housing through the second longitudinal end when open until an inner surface portion of the second cover component engages the second shoulder preventing further insertion of the second cover component; and

deforming a second end portion of the housing between the second shoulder and the second longitudinal end at an acute angle relative to the longitudinal axis against an axial outer circumferential contact surface extending at a corresponding acute angle relative to the longitudinal axis and about an axial outer surface portion of the second cover component to secure the second cover component in the housing with the second cover component sealing the second longitudinal end of the housing closed.

21. (new) A method according to claim 20 wherein

the deforming of the first and second end portions is performed simultaneously by applying forces in opposite axial directions.

22. (new) A method according to claim 19 wherein

the deforming of the first and second end portions is performed simultaneously by applying forces in opposite axial directions.

23. (new) A method according to claim 11 wherein

the first cover component is inserted into the housing by a feed bevel of a positioning tool enclosing a free end edge of the first end portion of the housing.

24. (new) A method according to claim 11 wherein

an inner circumference of a free end edge of the first longitudinal end comprises an insertion bevel widening toward an exterior of the housing to guide the first cover component into the housing.

25. (new) A method according to claim 11 wherein

the first cover component has a height at least twice a height of a deformed section of the first end portion overlying the contact surface.

26. (new) A method according to claim 20 wherein

each of the cover components has a height at least twice a height of a deformed section of the respective end portion overlying the respective contact surface.

27. (new) A method according to claim 11 wherein

a deformed section of the first end portion is deformed at an obtuse angle.

28. (new) A method according to claim 20 wherein
a deformed section of each end portion is deformed at an obtuse angle.
29. (new) A method according to claim 27 wherein
the deformed section extends directly from the first longitudinal end.
30. (new) A method according to claim 27 wherein
each deformed section extends directly from the respective longitudinal end.